EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1128	wallach.in. or ramakrishnan.in. or "shmushkovich.in"	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:05
L2	91	I1 and (nik or (NF-kappa B-inducing kinase))	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08
L3	200	IL-2 near6 (nik or (NF-kappa B-inducing kinase))	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08
L4	2	I2 and I3	US-PGPUB; USPAT	OR	OFF	2007/03/22 22:08





A service of the National Library of Medicine and the National Institutes of Health

My NCBI ②
[Sign In] [Register]

		www.pubmed.gov		[Sign m] [Register]		
All Databases Publ	Med N	ucleotide Protein Genome Structure (OMIM	PMC Journals Books		
Search PubMed	ĬŽ.	for rheumatoid arthritis IL-2 review	G	Save Search		
Ĺ	imits	Preview/Index History Clipboard				
About Entrez	(Summary Show 20 Significant Show Show Show Significant Show Show Significant Show Show Show Significant Show Show Significant Show Significant Show Show Significant Show Signif	ort by	Send to ▼		
Text Version	Selecte	ed: 8				
Entrez PubMed Overview		ems 81 - 95 of 95	Previou	us Page 5 of 5		
Help FAQ	□81:	Shand N, Richardson B.		Related Articles, Links		
Tutorials New/Noteworthy E-Utilities		Sandimmun (cyclosporin A): mode of a rheumatoid arthritis. Scand J Rheumatol Suppl. 1988;76:265-PMID: 3075082 [PubMed - indexed for	-78. Rev	view.		
PubMed Services	□82:	Ostensen M, Forre O.		Related Articles, Links		
Journals Database MeSH Database Single Citation Matcher Batch Citation		Modulation of human natural killer cell rheumatic disease. Scand J Rheumatol Suppl. 1988;76:183-PMID: 3075075 [PubMed - indexed for	-8. Revi	ew.		
Matcher	□83:	Kitas GD, Salmon M, Allan IM, Bacon	PA.	Related Articles, Links		
Clinical Queries Special Queries LinkOut		The T cell system in rheumatoid arthritise Scand J Rheumatol Suppl. 1988;76:161-PMID: 3075073 [PubMed - indexed for	-73. Rev	iew.		
My NCBI Related Resources	□84:	Forre O, Waalen K, Natvig JB, Kjeldser Kragh J.	<u>1-</u>	Related Articles, Links		
Order Documents NLM Mobile NLM Catalog NLM Gateway		Evidence for activation of rheumatoid sydevelopment of rheumatoid T cell clone Scand J Rheumatol Suppl. 1988;76:153-PMID: 3075072 [PubMed - indexed for	s. -60. Rev	Review.		
TOXNET Consumer Health Clinical Alerts ClinicalTrials.gov PubMed Central	□ 85:	Kolarz G. Pathogenesis of rheumatoid arthritis. Acta Med Austriaca. 1988;15(5):128-30 PMID: 2464266 [PubMed - indexed for). Revie			
	□86:	Kucharz EJ.		Related Articles, Links		

[Plasma inhibitors of interleukin 2 in normal conditions and in

	pathological states] Wiad Lek. 1987 Aug 15;40(16):1111-5. Review available. PMID: 3326287 [PubMed - indexed for MEDI	
┌87:	Arenzana-Seisdedos F, Teyton L, Virelizier JL.	Related Articles, Links
	Immunoregulatory mediators in the pathogeness arthritis. Scand J Rheumatol Suppl. 1987;66:13-7. Revie PMID: 3131870 [PubMed - indexed for MEDI	ew.
□88:	Emery P, Williamson DJ, Mackay IR.	Related Articles, Links
	Role of cytokines in rheumatological inflamma Concepts Immunopathol. 1987;4:171-99. Revie available.	ew. No abstract
	PMID: 2439208 [PubMed - indexed for MEDI	-
□ 89 :	Sibbitt WL Jr, Bankhurst AD.	Related Articles, Links
	Natural killer cells in connective tissue disorde Clin Rheum Dis. 1985 Dec;11(3):507-21. Revi PMID: 3907953 [PubMed - indexed for MEDI	ew.
┌90:	Talal N.	Related Articles, Links
	Interleukins, interferon and rheumatic disease. Clin Rheum Dis. 1985 Dec;11(3):633-44. Reviavailable. PMID: 2416506 [PubMed - indexed for MEDI	
 01		_
191:	Stecher VJ, Carlson JA, Connolly KM, Bailey DM.	Related Articles, Links
	Disease-modifying antirheumatic drugs. Med Res Rev. 1985 Jul-Sep;5(3):371-90. Reviewavailable. PMID: 3894835 [PubMed - indexed for MEDI	
□92:	Pichler WJ, Emmendorffer A, Peter HH, Deicher HR, Fontana A, de Weck AL.	Related Articles, Links
	[Analysis of T-cell subpopulations. Pathophysisignificance for clinical medicine] Schweiz Med Wochenschr. 1985 Apr 20;115(1) German.	
	PMID: 3159084 [PubMed - indexed for MEDI	LINE]

	Pathophysiologic aspects of lymphokines. Clin Immunol Rev. 1985;4(2):201-40. Revie PMID: 2417771 [PubMed - indexed for ME	ew. DLINE]
□94:	Alarcon-Segovia D.	Related Articles, Links
	Mixed connective tissue disease: a disorder Semin Arthritis Rheum. 1983 Aug;13(1 Sup abstract available. PMID: 6226095 [PubMed - indexed for ME	opl 1):114-20. Review. No
┌ 95:	Mizel SB.	Related Articles, Links
	Biochemical and biological characterization factor (LAF) produced by the murine macro Ann N.Y Acad Sci. 1979;332:539-49. Revie PMID: 231409 [PubMed - indexed for MED]	phage cell line, P388D. ew. No abstract available.
It	tems 81 - 95 of 95 Pre	vious Page 5 of 5
Display	Show 20 Sort by	/ ▼ Send to ▼

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Mar 19 2007 07:18:03





A service of the National Library of Medicine and the National Institutes of Health My NCBI ②
[Sign In] [Register]

All Databases	PubMed Nucleotide Protein Genome Structure OMIM PMC Jo	ournals Books
Search PubMed	for IL-2 nik Go Clear	Save Search
	Limits Preview/Index History Clipboard Details	
	Display Summary Show 20 Sort by Send	to 🔻
About Entrez	All: 5 Review: 1 🔀	
Text Version	Items 1 - 5 of 5	One page.

Entrez PubMed
Overview
Help | FAQ
Tutorials
New/Noteworthy
E-Utilities

☐ 1: Sanchez-Valdepenas C, Martin AG,
Ramakrishnan P, Wallach D, Fresno M.

NE lange B in language in invalent in the activation of the CD28

NF-kappaB-inducing kinase is involved in the activation of the CD28 responsive element through phosphorylation of c-Rel and regulation of its transactivating activity.

J Immunol. 2006 Apr 15;176(8):4666-74.

PMID: 16585559 [PubMed - indexed for MEDLINE]

Journals Database MeSH Database Single Citation Matcher

PubMed Services

Matcher
Batch Citation

Matcher

Clinical Queries

Special Queries LinkOut

Related Resources

Order Documents

NLM Mobile NLM Catalog

NLM Gateway

Clinical Alerts

Consumer Health

ClinicalTrials.gov

PubMed Central

TOXNET

My NCBI

T2: <u>Lu LF, Gondek DC, Scott ZA, Noelle RJ.</u> Related Articles, Links

NF kappa B-inducing kinase deficiency results in the development of a subset of regulatory T cells, which shows a hyperproliferative activity

upon glucocorticoid-induced TNF receptor family-related gene stimulation.

J Immunol. 2005 Aug 1;175(3):1651-7.

PMID: 16034105 [PubMed - indexed for MEDLINE]

□3: Matsumoto M, Yamada T, Yoshinaga SK,
Boone T, Horan T, Fujita S, Li Y, Mitani T.

Related Articles, Links

Essential role of NF-kappa B-inducing kinase in T cell activation through the TCR/CD3 pathway.

J Immunol. 2002 Aug 1;169(3):1151-8.

PMID: 12133934 [PubMed - indexed for MEDLINE]

☐ 4: Yamada T, Mitani T, Yorita K, Uchida D,

Matsushima A, Iwamasa K, Fujita S,

Matsumoto M.

Related Articles, Links



Abnormal immune function of hemopoietic cells from alymphoplasia (aly) mice, a natural strain with mutant NF-kappa B-inducing kinase. J Immunol. 2000 Jul 15;165(2):804-12.

PMID: 10878354 [PubMed - indexed for MEDLINE]

☐ 5: O'Neill LA, Greene C.

Related Articles, Links

Signal transduction pathways activated by the IL-1 receptor family: ancient signaling machinery in mammals, insects, and plants.

J Leukoc Biol. 1998 Jun;63(6):650-7. Review.

PMID: 9620655 [PubMed - indexed for MEDLINE]

Display Summary Show 20 Sort by Send to

Write to the Help Desk

NCBI | NLM | NIH

Department of Health & Human Services

Privacy Statement | Freedom of Information Act | Disclaimer

Mar 19 2007 07:18:03

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"5854003".pn.	US-PGPUB; USPAT	OR	OFF	2007/03/22 20:32
L2	3	(NF-kappa B-inducing kinase or NIK) near8 (IL-2 or IL2)	US-PGPUB; USPAT	ADJ	OFF	2007/03/22 20:46

Welcome to STN International! Enter x:x

```
LOGINID: SSPTASXS1656
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
                     Welcome to STN International
NEWS
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
                  "Ask CAS" for self-help around the clock
NEWS 3 DEC 18 CA/CAplus pre-1967 chemical substance index entries
enhanced
                 with preparation role
NEWS
         DEC 18
                 CA/CAplus patent kind codes updated
NEWS
         DEC 18
                 MARPAT to CA/CAplus accession number crossover
limit increased
                 to 50,000
                 MEDLINE updated in preparation for 2007 reload
NEWS
     6 DEC 18
NEWS 7
                 CA/CAplus enhanced with more pre-1907 records
         DEC 27
NEWS
      8 JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of
Chemicals
NEWS 9
        JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and
reloaded
NEWS 10 JAN 16
                 IPC version 2007.01 thesaurus available on STN
NEWS 11 JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8
reclassification data
NEWS 12 JAN 22
                 CA/CAplus updated with revised CAS roles
NEWS 13
         JAN 22
                 CA/CAplus enhanced with patent applications from
India
NEWS 14
         JAN 29
                 PHAR reloaded with new search and display fields
NEWS 15
         JAN 29
                 CAS Registry Number crossover limit increased to
300,000 in
                 multiple databases
NEWS 16
         FEB 15
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 17
         FEB 15
                 RUSSIAPAT enhanced with pre-1994 records
NEWS 18
        FEB 23
                 KOREAPAT enhanced with IPC 8 features and
functionality
        FEB 26
NEWS 19
                 MEDLINE reloaded with enhancements
NEWS 20
         FEB 26
                 EMBASE enhanced with Clinical Trial Number field
NEWS 21
         FEB 26
                 TOXCENTER enhanced with reloaded MEDLINE
NEWS 22
         FEB 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 23
         FEB 26
                 CAS Registry Number crossover limit increased from
10,000
```

to 300,000 in multiple databases

NEWS 24 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format

NEWS 25 MAR 16 CASREACT coverage extended

NEWS 26 MAR 20 MARPAT now updated daily

NEWS 27 MAR 22 LWPI reloaded

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation
of IPC 8
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 20:52:45 ON 22 MAR 2007

=> File Medline EMBASE Biosis Caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 20:53:02 ON 22 MAR 2007

FILE 'EMBASE' ENTERED AT 20:53:02 ON 22 MAR 2007 Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'BIOSIS' ENTERED AT 20:53:02 ON 22 MAR 2007 Copyright (c) 2007 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 20:53:02 ON 22 MAR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> duplicate ENTER REMOVE, IDENTIFY, ONLY, OR (?):remove ENTER L# LIST OR (END):11 DUPLICATE PREFERENCE IS 'MEDLINE, EMBASE, BIOSIS, CAPLUS' KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n PROCESSING COMPLETED FOR L1 L24 DUPLICATE REMOVE L1 (6 DUPLICATES REMOVED) => d l2 1-4 bib ab ANSWER 1 OF 4 L2MEDLINE on STN DUPLICATE 1 AN 2006187607 MEDLINE DN PubMed ID: 16585559 NF-kappaB-inducing kinase is involved in the activation of the ΤI CD28 responsive element through phosphorylation of c-Rel and regulation of its transactivating activity. Sanchez-Valdepenas Carmen; Martin Angel G; Ramakrishnan ΑU Parameswaran; Wallach David; Fresno Manuel CS Centro de Biologia Molecular, Consejo Superior de Investigaciones Cientificas, Universidad Autonoma de Madrid, Madrid, Spain. SO Journal of immunology (Baltimore, Md. : 1950), (2006 Apr 15) Vol. 176, No. 8, pp. 4666-74. Journal code: 2985117R. ISSN: 0022-1767. CY United States DTJournal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T) LA English FS Abridged Index Medicus Journals; Priority Journals EΜ 200605 ED Entered STN: 5 Apr 2006 Last Updated on STN: 17 May 2006 Entered Medline: 16 May 2006 Previous evidence suggested that NF-kappaB-inducing kinase (NIK) AΒ might regulate IL-2 synthesis. However, the molecular mechanism is not understood. In this study, we show that NIK is involved in CD3 plus CD28 activation of IL-2 transcription. Splenic T cells from aly/aly mice (that have a defective NIK protein) have a severe impairment in IL-2 and GM-CSF but not TNF secretion in response to CD3/CD28. This effect takes place at the transcriptional level as overexpression of alyNIK inhibits IL-2 promoter transcription. NIK activates the CD28 responsive element (CD28RE) of the IL-2 promoter and

strongly synergizes with c-Rel in this activity. We found that

NIK

interacts with the N-terminal domain of c-Rel, mapping this interaction to

aa 771-947 of NIK. Moreover, NIK phosphorylates the c-Rel C-terminal

transactivation domain (TAD) and induces Gal4-c-Rel-transactivating

activity. Anti-CD28 activated Gal4-c-Rel transactivation activity, and

this effect was inhibited by a NIK-defective mutant. Deletion studies

mapped the region of c-Rel responsive to NIK in aa 456-540. Mutation of

several serines, including Ser471, in the TAD of c-Rel abrogated the

NIK-enhancing activity of its transactivating activity. Interestingly, a

Jurkat mutant cell line that expresses one of the mutations of c-Rel

(Ser471Asn) has a severe defect in IL-2 and CD28RE-dependent transcription

controlling CD28RE-dependent transcription and T cell activation by

modulating c-Rel phosphorylation of the TAD. This leads to more efficient

transactivation of genes which are dependent on CD28RE sites where c-Rel

binds such as the IL-2 promoter.

L2 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:837297 CAPLUS

DN 139:312400

TI Modulation of NIK with IL-2 common γ chain and therapeutic uses thereof

IN Wallach, David; Ramakrishnan, Parameswaran; Shmushkovich, Taisia

PA Yeda Research and Development Co.Ltd, Israel

SO PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO.

DATE

----PI WO 2003087380 A1 20031023 WO 2003-TL317

PI WO 2003087380 A1 20031023 WO 2003-IL317

20030415

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,

```
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO,
NZ, OM,
             PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN,
TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI,
SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG
     CA 2482387
                          A1
                                 20031023
                                             CA 2003-2482387
20030415
     AU 2003226607
                          A1
                                 20031027
                                             AU 2003-226607
20030415
     EP 1499729
                          A1
                                 20050126
                                           EP 2003-746399
20030415
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
SK
     JP 2005530491
                          Т
                                 20051013
                                             JP 2003-584319
20030415
     US 2005272633
                          A1
                                 20051208
                                             US 2005-511314
20050517
PRAI IL 2002-149217
                          A ·
                                 20020418
     IL 2002-152183
                          Α
                                 20021008
     WO 2003-IL317
                          W
                                 20030415
AB
     This invention relates to the use of NIK and related mols. for
the
     modulation of signal activities controlled by cytokines, and
some new such
     mols.
            In addition the invention relates to the use of a DNA
encoding NIK, or
     its antisense, NIK specific antibodies, a small mol. obtainable
by
     screening products of combinatorial chemical in a luciferase
system, for
     modulating the interaction between IL-2 common gamma
```

functional derivative, circularly permutated derivative or fragment thereof, in the manufacture of a

chain $(c\gamma c)$ and NIK. The present invention also relates to the use of NIK or a mutein, variant, fusion protein,

medicament for the treatment of a disease, wherein a cytokine stimulating

signalling trough the IL-2 cyc is involved in the pathogenesis of $% \left(1\right) =\left(1\right) +\left(1\right) +$

the disease.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN
L2
```

2003:837291 CAPLUS AN

DN 139:328743

TI Modulating interaction of IL-2 with NIK by derivatives of the IL-2 common gamma chain, and therapeutic uses thereof

Wallach, David; Ramakrishnan, Parameswaran; Shmushkovich, Taisia IN

Yeda Research and Development Co. Ltd., Israel PA

SO PCT Int. Appl., 103 pp.

CODEN: PIXXD2

Patent DT

LA English

FAN.CNT 2 PATENT NO. DATE				KIND		DATE		APPLICATION NO.							
 PI	PI WO 2003087374					A1 20031023			WO 2003-IL316						
2003	0415		 .												
	WO 2003				A9		2005		Dλ	מס	D.C.	ממ	DV	D7	CA
CH,	W:	AL,	AG,	AL,	AIN,	ΑΙ,	AU,	ΑΔ,	DA,	DD,	ъG,	DK,	ы,	DZ,	CA,
C.1.7	CI,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,
GE,	GH,	•	·	•	•	•	•	•	•	•			·	·	·
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KŖ,	KZ,	LC,
LK,	LR,														
NT/7	OM	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,
NZ,	OM,	DП	DT.	יזים	PΛ	זזם	SC,	gn	C Tr	gC.	СK	QT.	т.т	тм	תית
TR,	ΤΤ.	E11,	FЦ,	Г.,	RO,	RO,	SC,	, ענ	, ם כ	JG,	DIC,	ъщ,	10,	111,	. 111/
,	,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:						MZ,						ZM,	ZW,	AM,
AZ,	BY,														
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
EE,	ES,	ידיקו		CD	CD	****	TD	TO	T TT	MC	NTT	ייים	DΟ	C E	СТ
SK,	πъ	гı,	rk,	GB,	GR,	нU,	IE,	ш,	цU,	MC,	иш,	ΡΙ,	RO,	SE,	51,
DIC,	11()	BF.	BJ,	CF.	CG.	CI,	CM,	GA,	GN.	GO,	GW,	ML,	MR,	NE,	SN,
TD,	TG		,	,	,	,	•	,	,	- ~ ,	•	•	,	•	
	CA 2482	718			A1		2003	1023	1	CA 2	003-	2482	718		
20030415															
AU 2003222415							2003	1027		AU 2	003-	2224	15		
20030415 EP 1499724					A1		2005	0126		כ מם	003-	7175	04		
20030415							2005	0120		₽F Z	003-	, 1 , 5	U- 1		
		ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,
MC,		•	·	•	·	·	·	Í	·	·	·	·	·		·

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,

SK

JP 2005525113 T 20050825 JP 2003-584315

20030415

US 2005287144 A1 20051229 US 2005-511722

20050622

PRAI IL 2002-149217 A 20020418 IL 2002-152183 A 20021008 WO 2003-IL316 W 20030415

AB This invention relates to the use of IL-2 common gamma chain (cyc)

and related mols. for the modulation of signal activities controlled by

cytokines, and therapeutic uses thereof. Specifically, the invention

relates to the use of IL-2 c γ c or a mutein, variant, fusion protein,

the intracellular domain of cyc (ICDcyc), 1-357, 1-341

functional derivative, circularly permutated derivative or fragment thereof for

modulating the interaction between cγc and NIK. In addition the invention relates to the use of a DNA encoding cγc or derivs., a DNA

encoding the antisense of cyc, an antibody specific to cyc, or a small mol. obtainable by screening products of combinatory chemical in a

luciferase system, for modulating the interaction between IL-2 common gamma chain (cyc) and NIK. In another

aspect, the invention provides the use of cyc or derivs. in the manufacture of a medicament for treatment of a disease, wherein NIK activity is

involved in the pathogenesis of the disease.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 4 MEDLINE on STN

DUPLICATE 2

AN 2002385095 MEDLINE

DN PubMed ID: 12133934

TI Essential role of NF-kappa B-inducing kinase in T cell activation through

the TCR/CD3 pathway.

AU Matsumoto Mitsuru; Yamada Takuji; Yoshinaga Steven K; Boone Tom; Horan

Tom; Fujita Shigeru; Li Yi; Mitani Tasuku

CS Division of Molecular Immunology, Institute for Enzyme Research, University of Tokushima, Tokushima, Japan..

mitsuru@ier.tokushima-u.ac.jp

SO Journal of immunology (Baltimore, Md. : 1950), (2002 Aug 1) Vol. 169, No.

3, pp. 1151-8.

Journal code: 2985117R. ISSN: 0022-1767.

CY United States

DT Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LA English

FS Abridged Index Medicus Journals; Priority Journals

EM 200208

ED Entered STN: 23 Jul 2002

Last Updated on STN: 30 Aug 2002

Entered Medline: 13 Aug 2002

AB NF-kappa B-inducing kinase (NIK) is involved in lymphoid organogenesis in

mice through lymphotoxin-beta receptor signaling. To clarify the roles of

NIK in T cell activation through TCR/CD3 and costimulation pathways, we

have studied the function of T cells from aly mice, a strain with mutant

NIK. NIK mutant T cells showed impaired proliferation and IL-2 production in response to anti-CD3 stimulation, and these effects were caused by impaired NF-kappa B activity in both mature

and immature T cells; the impaired NF-kappa B activity in mature T cells

was also associated with the failure of maintenance of activated NF-kappa

B. In contrast, responses to costimulatory signals were largely retained

in aly mice, suggesting that NIK is not uniquely coupled to the costimulatory pathways. When NIK mutant T cells were stimulated in the

presence of a protein kinase C (PKC) inhibitor, proliferative responses

were abrogated more severely than in control mice, suggesting that both

NIK and PKC control T cell activation in a cooperative manner. We also

demonstrated that NIK and PKC are involved in distinct NF-kappa B activation pathways downstream of TCR/CD3. These results suggest critical

roles for NIK in setting the threshold for T cell activation, and partly

account for the immunodeficiency in aly mice.